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Rowan Salt, "InfoServices: a multi-channel, multi-tier model for information service delivery." *Proceedings of the IATUL Conferences*. Paper 32.

<http://docs.lib.purdue.edu/iatul/2004/papers/32>

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InfoServices: A Multi-Channel, Multi-Tier Model For Information Service Delivery

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Abstract:

Griffith University's Division of Information Services provides integrated library, information technology and flexible learning services to Griffith's community of approximately 30,000 staff and students. A Division-wide restructure in 2001 led to the creation of InfoServices, a new organisational unit created from members of library and information technology front-line staff. This unit was presented with the challenge of answering the majority of customer inquiries related to the Division's products and services. InfoServices seeks to resolve 80% of all customer inquiries at first contact, regardless of product. In order to meet this demand, InfoServices implemented a multi-channel multi-tier service delivery model.

InfoServices' model comprises of three channels; the face-to-face service provided from each of the six campus libraries, a phone channel, delivered via a purpose-built 20 seat contact centre at the Nathan (Brisbane, Queensland) campus, and a digital channel, comprising web, e-mail and live electronic assistance. This multi-tier structure consists of Tier Zero, consisting of web-based and other self-help materials such as knowledge bases, frequently asked questions, and web forms. These resources empower clients to resolve their issues without intervention from InfoServices. Tier One encompasses the Library information desks, the contact centre and the e-mail answer service. Tiers Two and Three are specialist support groups such as Network Administrators and Information Literacy Specialists. To ensure the highest standards of customer service, InfoServices has standardised its service offerings, procedures and branding across all three channels, in addition to developing robust protocols for escalation and resolution of customer issues.

Providing resolution to 80% of all customer enquiries has required a large amount of staff training and development. The three major directions of the training have been cross-skilling the staff across both library and information technology support, the ongoing development of best practice work methods for each of the products InfoServices supports, and a program of customer service training, designed and delivered in-house. Each of these training opportunities has been developed and provided for all InfoServices staff - regardless of campus or channel; further strengthening the consistency of InfoServices service.

The paper further discusses the change management implications of bringing together Library and Information Technology staff to provide an integrated service, in particular the issues related to providing an effective service during periods of great internal change. InfoServices current initiatives related to its collaboration with Queensland University of Technology to provide out-of-hours support are also discussed.

Introduction

Griffith University is one of Australia's most progressive and dynamic tertiary institutions. With six campuses in Queensland's Brisbane-Gold Coast corridor, and a total of approximately 30,000 students, Griffith is acknowledged as one of Australia's top universities.

The Division of Information Services provides integrated Information Technology (IT), Flexible Learning and Library services to the Griffith University community. InfoServices is an organisational unit within the Division, responsible for the first point of customer contact for the majority of the Divisions products and services.

History

During 2000-2001, Information Services undertook a realignment program which further integrated its services; aligning the organisation's structure to its products and services. One of the major outcomes of the realignment was that rather than being organised by campus, with a Library Manager and an Information Technology Manager for each campus, and local staff reporting to these managers, Product Managers were appointed, with responsibility for delivery of a product or service across the entire university. For example, Lending Services staff now report to the Manager, Lending Services rather than a campus manager. Coordination of teams at the campus level is provided by Team Leaders. This arrangement ensures the highest degree of cross-campus consistency possible. This is a key issue for Information Services, as Griffith has six campuses, and a highly mobile client base. It is not uncommon for Academic staff to teach the same course, or for students to attend classes on multiple campuses. Previous to the Realignment, local management of service delivery meant that processes for requesting services (for example) may have varied from campus to campus. Duplication of services and effort was inevitable, incurring unnecessary effort and expenses, and making compliance in areas such as copyright problematic. The new product/service – as opposed to geographic - organisational structure enables economies of scale and innovative models of service such as InfoServices.

InfoServices was designed from the outset as a complete service delivery model, encompassing face-to-face, telephone and digital information services. During the Information Services Realignment program, a project team was established, and given the brief of designing a strategy to resolve 80% of all 'front-line' enquiries at first point of customer contact. InfoServices (at the time known as INS ASSIST) purpose was expressed initially as:

"... each channel at the first point of contact with the client will be able to answer or satisfy 80% of all calls or requests without further referral. INS ASSIST staff accept responsibility for the client's enquiry even in those cases where they are not able to resolve the issue."

and:

"Our aim is to strike a balance along the continuum of the "one stop shop" concept and multiple differentiated service points, where ease of access, speed and quality of service and cost effectiveness are optimized. This model should then be applied as consistently as possible across campuses to provide a unified, coherent service."

Service Delivery Model

InfoServices' model comprises of three channels; the face-to-face service provided from each of the six campus libraries, a phone channel, delivered via a purpose-built 20 seat contact centre at the Nathan campus, and a digital channel, comprising web, e-mail and live electronic assistance. This multi-tier structure consists of Tier Zero, which aggregates web-based and other self-help materials such as knowledge bases, frequently asked questions, and web forms. These resources empower clients to resolve their issues without intervention from InfoServices. Tier One encompasses the Library information desks, the contact centre and the e-mail answer service. Tiers Two and Three are specialist support groups such as Network Administrators and Information Literacy Specialists. To ensure the highest standards of customer service, InfoServices has standardised its service offerings, procedures and branding across all three channels, in addition to developing robust protocols for escalation and resolution of customer issues.

Tier 0: Self-Help	Tier 1: InfoServices			Tier 2: Specialist	Tier 3: Escalation
<div>InfoServices Help Desk</div> <div><ul style="list-style-type: none">Library Catalogue & DatabasesInformation Literacy BookingsInternet / WWWInternet Usage ManagementPassword ManagementFrequently Asked QuestionsFAQsProduct Information</div>	<div>Face-to-Face</div> <div><ul style="list-style-type: none">InfoServices Desks</div>	<div>Telephone</div> <div><ul style="list-style-type: none">InfoServices Contact Centre</div>	<div>Digital</div> <div><ul style="list-style-type: none">Ask InfoServices E-mail</div>	<div><ul style="list-style-type: none">Desktop Management SystemExpert ReferenceInformation LiteracyBusiness Systems SupportFaculty Librarians</div>	<div><ul style="list-style-type: none">Teaching & Learning SystemsNetwork/TelephonySpecialised ApplicationsServer Infrastructure</div>
Web Based Services	Support				Specialised Systems
	Databases, Knowledge Bases, ITIL, Call Monitoring, Policy/Procedure Framework, Administration				
	Project & Continuous Development Teams				

Figure 1: InfoServices service delivery model

Tier Zero (InfoServices Help Desk)

Tier Zero is the first stage of the InfoServices service delivery model. Tier Zero is a component of the digital channel which aggregates self-help materials produced by Information Services, and offers escalation paths to Tier One support where necessary. Tier Zero provides customer support without staff intervention. This approach has cost benefits to Information Services through improving the return on investment on resources and support, and freeing InfoServices staff to apply their time and expertise to more sophisticated queries.

Tier One

Face-to-face

The face-to-face service encompasses the InfoServices desks in each campus library. This service provides the standard range of Reference services, in addition to first-tier computing and information literacy support. The desk is staffed by a mixture of InfoServices staff, Faculty Librarians and Information Literacy Specialists. Information Literacy Specialists and Faculty Librarians are provided by other service groups within Information Services. Faculty Librarians and Information Specialists contribute 25% of their time to InfoServices in the form of desk hours. This arrangement provides customer contact hours for the professional staff, and is integrated into collection development and Information literacy programs produced by these staff. InfoServices in turn provides these groups with 25% of InfoServices' face-to-face staff time to contribute to activities outside of InfoServices, such as collection development and the development and delivery of

information literacy programs. Through this arrangement, InfoServices staff maintain their professional development in areas outside InfoServices' core business. This is of benefit in that InfoServices face-to-face staff are generally recently graduated librarians, or qualified at the paraprofessional level. Ongoing professional development, and the opportunity to progress through the realigned organisation is a significant factor in the recruitment and retention of high-quality staff.

Telephone

The major output of the initial INS-ASSIST project team was a comprehensive document [1] which outlined several options to achieve the goal of responding to 100% of inbound customer calls, and resolving 80% of these calls. These options included:

- A single phone number connected to a central call-distribution centre. Calls would be distributed to the next available InfoServices staff member (regardless of agent location or skill set)
- Two or more phone numbers, segmenting InfoServices' client groups (e.g. academic staff, general staff, or postgraduate and undergraduate students). Calls would be answered by staff specialising in the query types most frequently associated with each client group.
- A single phone number connected to an integrated voice response (IVR) system. The system would ask questions and provide options and a menu system for clients to narrow their query before InfoServices staff members answer the call in person.

A fourth and more ambitious option suggested building a Contact Centre which would house a team of staff responding to the full range of calls received by the Division's customer service units. This option went the furthest to fulfilling the mission of InfoServices, and was finally selected.

The telephone service is accessed using a single telephone extension (55555). The Phone Channel is delivered from a purpose-built 20-seat call centre, housed at the University's Nathan campus. The Contact Centre is staffed between 6am and 1am Monday to Friday, and 10am to 5pm Saturday and Sunday. Staff are trained to respond to all inquiries entering the Contact Centre, including the full range of IT, library and flexible learning services. Where InfoServices are not able to resolve the customer enquiry, escalation paths are provided. InfoServices seeks – and achieves - resolution of 80% of all enquiries. During 2003, the contact Centre answered 102,467 calls for assistance.

Digital

The Digital Channel is comprised of the InfoServices Help Desk at Tier Zero, and the Ask InfoServices e-mail answer service and – potentially - a live web-collaboration service at Tier One. The Digital Channel has been designed to answer as many customer enquiries as possible without intervention, and to escalate appropriately.

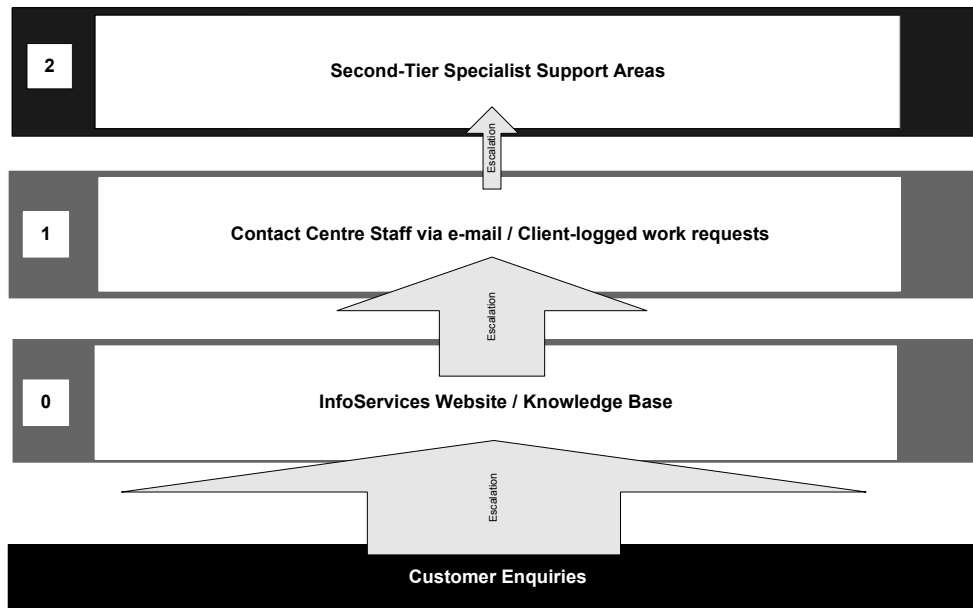


Figure 2: InfoServices digital channel escalation paths

E-mail (Ask InfoServices)

Prior to the establishment of InfoServices, the groups within Information Services maintained a multitude of e-mail aliases for customer contact. The majority of these addresses were removed from circulation early in 2003, and re-directed to an infoservices@griffith.edu.au address. E-mail sent to this address arrives at a Lotus Notes mail-in database. InfoServices staff have access to the database from their desktops, and are rostered in shifts to respond to customer service e-mail. An e-mail style manual has been produced which outlines procedures for responding to e-mail, including formats, and standard responses and templates. As the range of products and services supported by the Ask InfoServices service is identical to that supported by the face-to-face and telephone channels, it is relatively simple for InfoServices to respond to all incoming customer service e-mail using existing best practice work methods. This cross-channel consistency enhances customer access and convenience, and strengthens the InfoServices brand. The March e-mail volume for 2002, 2003 and 2004 (Table 1 and Figure 3) provides an indication of the increase in e-mail volume caused by moving to a single address. March has traditionally one of the peak months of the year for information services inquiries at Griffith University, as it coincides with the first few weeks of Semester one. The 2002 figure of 104 e-mails represents the total e-mails sent to *Ask A Librarian* services across all campuses. The *Ask InfoServices* service was launched in March 2003. March 2004 was the busiest year to date, with 1,943 e-mails being responded to, achieving a 1st Tier resolution rate of 84%.

Year	March E-mail	Notes
2002	104	Final Year of <i>Ask A Librarian</i>
2003	258	<i>Ask InfoServices</i> launched
2004	1,943	1,850% increase from 2002 750% increase from 2003 84% resolution rate

Table 1: Yearly comparison of March e-mail volume 2002-2004

Live Web Collaboration (Virtual Reference)

Live electronic assistance such as virtual reference services have been a planned component of the InfoServices service delivery model from the outset. During mid-2003, InfoServices undertook a successful technical trial of a leading virtual reference product. The service was delivered by customer contact staff during their regular rostered telephone and e-mail shifts. While the limited trial was successful, InfoServices had developed a great deal in the period between the initial design of the service, and many of the assumptions underpinning the belief in the need for a virtual reference service had proven misguided. In addition, the overlap between a highly mature and successful telephone service and the proposed electronic reference service meant that the business benefit of introducing such a service for the costs associated were marginal.

Live reference tools such as the one trialled are largely customised versions of electronic customer service software, targeted to large libraries. Information Services is currently introducing best-of-breed Division-wide service desk software, including customer call, service-level management, user profile and history management, escalation, notification and built-in knowledge tools. Web-collaboration modules for this service desk application are available, and will be investigated in the near future.

Nightline

An InfoServices activity that particularly highlights the benefits of this model is the Nightline service. Nightline is a component of the Griffith University-QUT Collaboration Program, which seeks to "...share resources, capability and expertise amongst Information Services of the two institutions [2]". Nightline is an out-of-hours telephone support service which provides first-tier support via the phone channel outside of the core operating hours, and is delivered for both institutions from the InfoServices Contact Centre. Nightline operates between 6:00am to 8:00am and 10:00pm to 1:00am Monday to Friday, extending InfoServices support to 19 hours per day during the week. Many of Information Services' customers need access to library and Information technology services late at night and early in the morning - both on campus and at home. The single-point-of-contact model used by InfoServices means that such a service is possible within existing resources. In addition, the lower call volumes during these hours mean that only one staff member from each institution is required to handle calls during these times.

Staff

As InfoServices was initially formed from previously-existing service groups, InfoServices staff possess a wide range of skills, experiences and qualifications. In general terms, face-to-face staff originate from the defunct Reference and Enquiry Services group, and have Library or related qualifications. Phone staff predominately originated in IT-Assist – the previous IT support telephone service - are generally qualified in IT or related areas. Aside from the usual change management implications, bringing these groups together successfully into a cohesive whole has required a solid technological and procedural framework, and training and development for all staff. Staff who have been recruited into InfoServices since its inception also require some additional training, as the skill-set possessed by InfoServices staff is unique.

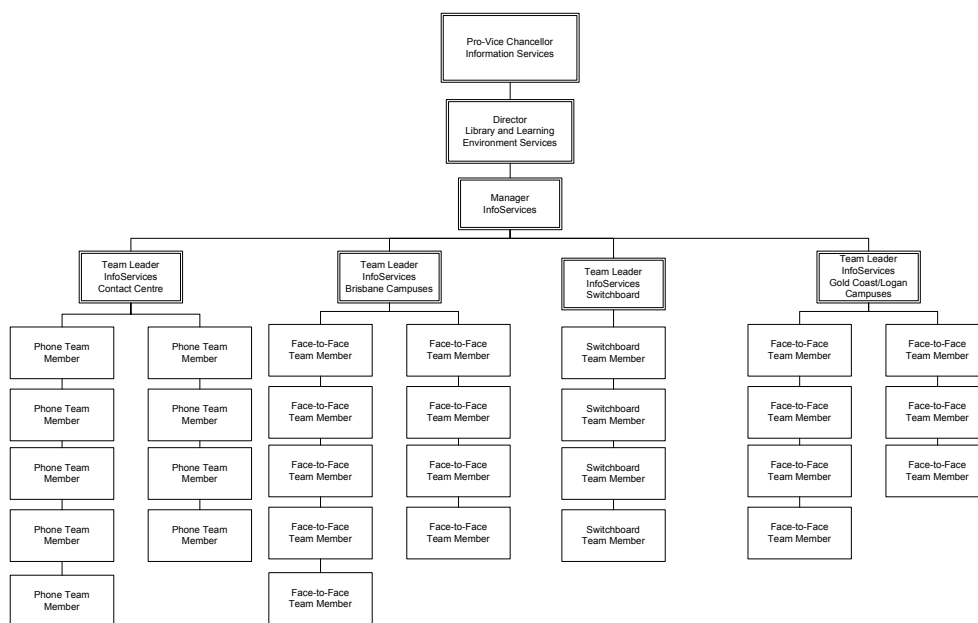


Figure 3: InfoServices organisational structure

Training and Development

The two major elements of InfoServices staff training and development are best practice work methods and customer service training; both designed and developed in-house. This strategy has helped InfoServices achieve and maintain a high degree of professionalism and consistency across a wide range of individual products and services.

Best practice work methods (BPWMs) are guidelines that explain how to best resolve customer enquiries from start to finish. InfoServices makes use of a standard template for BPWMs, which includes a description of the service, the scope of the work method and a workflow for resolving the inquiry. Product and Service Managers are responsible for the maintenance and accuracy of the content related to their products and services, as well as ensuring any changes or temporary issues are noted as necessary. In addition to product BPWMs, InfoServices has created a range of our own work methods, which guide InfoServices staff through areas such as telephone technique, logging unresolved customer requests,

responding to face-to-face library enquiries and customer service e-mail. BPWMs have served an absolutely critical function in getting the service 'off the ground' and continue to be updated and used both as reference and training materials. In the near future, the work methods will be exported into InfoServices' newly-purchased knowledge base tools.

The customer service training has been devised and delivered as a series of three two-day training sessions, which are delivered to groups of approximately fifteen InfoServices staff at a time. Staff attending the sessions are intentionally mixed between campuses and channels, to further reinforce cross-channel and cross-campus consistency, as well as to foster teamwork amongst the groups. The training functions as covers areas including Information Services mission, vision and values, InfoServices customer principles, key accountabilities of InfoServices staff, communications skills and models, call-handling processes, active listening, attending and explaining skills. In combination with the InfoServices best practice work methods, this training and associated course materials form the policy and procedural framework InfoServices staff operate within.

Technologies

InfoServices relies upon a technological framework of a core set of applications to deliver its services. This framework consists of commercial and 'in-house' applications, and includes job-logging and tracking, call distribution and monitoring, as well as customer relationship management (CRM) and knowledge base applications.

ICE (Integrated Client Enquiry) is a customer relationship tool which has been developed by Information Services. It employs a portal model to interrogate a number of databases, and display client information related to Information Services in a single place. For example, after entering a staff or student number, it is possible for InfoServices to see client contact details, enrolled subjects, courses listed in the course management system, e-mail and local area network account details, modem and Internet quota, and a range of options to escalate items as a 'job ticket' e-mail to the appropriate Tier Two group.

Information Services is currently replacing its long-serving job logging and tracking systems with an ITIL-compliant service desk tool. ITIL (IT Infrastructure Library) is a framework of best practices for IT service management. ITIL was developed during the 1980s, and has grown to become the *de facto* world-wide standard [3]. Information Services believes that ITIL has broader application to information services generally, and that implementing ITIL-compliant processes across the Division is the next logical phase of the Division's evolution.

Conclusion

By their very nature, University library and information services are highly complex organisations. The service delivery model implemented by Griffith University's InfoServices provides an example of the benefits that can be realised by integrating service groups and realigning organisational structures along product lines. These structures reduce the complexity of the organisation from the customer perspective, minimise duplication and waste, and provide economies of scale in service delivery across the service value chain.

Reference

- 1 Rosengren, J., J. Bromage, et al. 2001. INS ASSIST: A strategy for establishing multichannel enquiry service. Nathan, Griffith University: 2001.
2. Rowland, P. 2004. Night Line - out of hours information support project: 2004
3. Office of Government Commerce. 2002. Best practice for service support. London, The Stationery Office: 2002.